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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Pontus Wallentin

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EXAMINER

BRANDT, CHRISTOPHER M

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/533,643	<b>Applicant(s)</b> WALLENTIN, PONTUS	
	<b>Examiner</b> CHRISTOPHER M. BRANDT	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 24-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

This Action is in response to applicant's arguments submitted on August 30, 2010.

**Claims 1-19 and 24-27** are still currently pending in the present application.

### ***Response to Arguments***

Applicant's arguments filed August 30, 2010 have been fully considered but they are not persuasive.

With regard to applicant's arguments that neither Lehtovirta nor Vialen teach or suggest a collective indication, the examiner respectfully disagrees. Lehtovirta teaches that "the node sends a message to one or more nodes that selectively indicates which connections are affected by the failure and should be released. Those connections unaffected by the partial failure are maintained. Using this approach, unaffected connections are not released unnecessarily. On the other hand, there is no need to send individual messages for each connection that is affected by the partial failure, which keeps the control signaling load to a manageable level (paragraph 43)." In other words, Lehtovirta does teach a collective indication because the message indicates which connections are affected by the failure, while not sending individual messages (i.e. not sending separate messages but sending one message indicating all of the failures (collectively)).

In addition, the claims do not recite an intra-radio access network message as applicant asserts. Moreover, a node of a radio access network is a very broad term and therefore an RNC reads on a node. The claims simply recite a node of a radio access network. As is commonly understood, a node may be a user equipment, base station, access point, and/or radio network

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controller (see paragraph 13 of Lehtovirta). Furthermore, claim 2 recites that the node is a radio access control node, which can be read as an RNC.

With regard to applicant's argument that neither Lehtovirta nor Vialen teach or suggest dependent claims 3, 13, and 16, the examiner respectfully disagrees. As noted above, a node may be a user equipment, base station, access point, and/or radio network controller. In addition, the Lehtovirta and Vialen reference are combinable because Vialen discloses that a s-RNTI is allocated for all UEs having a RRC connection (column 2 lines 42-44).

With regard to applicant's argument that neither Lehtovirta nor Vialen teach or suggest dependent claims 4, 6, and 10, the examiner respectfully disagrees. As pointed out above, Lehtovirta does disclose a collective indication (paragraph 43). In addition, the combination of Lehtovirta's message indicated connection failures with Vialen S-RNTI would create a group S-RNTI (Lehtovirta; paragraph 43, Vialen; column 2 lines 42-56).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-19 and 24-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lehtovirta et al. (US PG PUB 2001/0034228 A1, hereinafter Lehtovirta)** in view of **Vialen et al. (US Patent 6,898,429 B1, hereinafter Vialen)**.

Consider **claim 1 (and similarly applied to claims 7, 11, 15, and 19)**. Lehtovirta discloses a node of a radio access network of a telecommunications system which prepares a message for transmission to at least one other node of the radio access network (paragraphs 17, 20, read as the RNC creates a message identifying those affected subscriber unit connections is sent to one or more other nodes), the message resulting from occurrence of a reset procedure affecting a control node which controls connections with user equipment units (30) in a connected mode (paragraph 17, where this message is sent if a node experiences a restart procedure (i.e. reset procedure)), the message including an element which collectively indicates that a subset of the connections are to be released so that the user equipment units involved in the subset of the connections can return to a registration connection (paragraphs 20, 44, 45, read as if there is a partial failure, such as a restart, the node forms a list of UEs and connections specifically affected by the partial failure, where the message includes UE identifiers and RAB identifiers (i.e. connection identifiers). In addition, the message includes whether the UE should maintain a registration connection).

Lehtovirta substantially discloses the claimed invention but fails to explicitly teach the element being recognizable when included in a further message received over an air interface by a user equipment unit having a connection in the subset whereby the user equipment unit can determine if it is to return to the idle mode.

However, Vialen teaches the element being recognizable when included in a further message received over an air interface by a user equipment unit having a connection in the subset whereby the user equipment unit can determine if it is to return to the idle mode (column 3 lines 23-36, column 4 lines 14-24, column 5 line 53 - column 6 line 4, read as the controlling or drift RNC sends a further message including an RNTI identifier based on the connection, where the message may be in regards to the releasing of a physical channel. In addition, if the message is regarding the release of a connection, the UE goes back into idle mode).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Vialen into the invention of Lehtovirta in order to reduce the signaling, thus conserving valuable resources.

Consider **claim 2 and as applied to claim 1**. Lehtovirta and Vialen disclose wherein the node which prepares the message is a radio network control node which controls the connections (Lehtovirta; paragraph 21).

Consider **claim 3 and as applied to claim 1**. Lehtovirta and Vialen disclose wherein the node performs plural processes with each of the plural processes handling a respective one of plural subsets of connections with user equipments in the connected mode, and wherein when the reset procedure affects a specific one of the plural processes, an element corresponding to the respective one of the plural subsets of connections handled by the specific one of the plural processes is included in the message (Lehtovirta; paragraphs 15, 17).

Consider **claim 4 and as applied to claim 1**. Lehtovirta and Vialen disclose wherein the element comprises a group identity for the subset of connections; wherein the group identity comprises a group value and a group bit mask index, wherein the group bit mask index indicates

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bits of the group value which are common for all connections of the subset of connections; and wherein the group value is a group S-RNTI and the group bit mask index indicates the bits of the group S-RNTI which are common for all connections of the subset of connections (Lehtovirta; paragraph 44, where Lehtovirta discusses the message including a list with UE identifiers that are affected by the connection failure, Vialen; column 2 lines 42-56, read as s-RNTI pertaining to the connection).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Vialen into the invention of Lehtovirta in order to reduce the signaling, thus conserving valuable resources.

Consider **claim 5 and as applied to claim 1**. Lehtovirta and Vialen disclose wherein the further message is prepared by a drift radio network control node which provides radio resources for the connections handled by a serving radio network control node (Vialen; column 5 line 53 – column 6 line 4).

Consider **claim 6 and as applied to claim 5**. Lehtovirta and Vialen disclose wherein the element comprises a group identity for the subset of connections; wherein the group identity comprises a group value, and a group bit mask index, wherein the group bit mask index indicates bits of the group value which are common for all connections of the subset of connections; and wherein the group value is a group U-RNTI and the group bit mask index indicates the bits of the U-RNTI value which are common for all connections of the subset of connections (Vialen; column 2 lines 42-56, column 5 line 53 – column 6 line 4, read as the UTRAN-RNTI (U-RNTI)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Vialen into the invention of Lehtovirta in order to reduce the signaling, thus conserving valuable resources.

Consider **claim 8 and as applied to claim 7**. Lehtovirta and Vialen disclose wherein the at least one drift control node is arranged, upon receipt of the message, to send a response message to the serving control node (Vialen; column 5 line 53 – column 6 line 4).

Consider **claim 9 and as applied to claim 7**. Lehtovirta and Vialen disclose wherein the at least one drift control node sends the further message via a base station controlled by the at least one drift control node, the further message including a further element, the further element being derived from the element included in the message (Vialen; column 5 line 53 - column 6 line 4).

Consider **claim 10 and as applied to claim 9**. Lehtovirta and Vialen disclose wherein the further element comprises a group identity for the subset of connections; wherein the group identity comprises a control node identifier indicative of the serving control node, a group value, a group bit mask index, and wherein the group bit mask index indicates bits of the group value which are common for all connections of the subset of connections; and wherein the group value is a group U-RNTI and the group bit mask index indicates the bits of the U-RNTI value which are common for all connections of the subset of connections (Vialen; column 2 lines 42-56, column 5 line 53 – column 6 line 4, read as the UTRAN-RNTI (U-RNTI)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Vialen into the invention of Lehtovirta in order to reduce the signaling, thus conserving valuable resources.



Consider **claim 12 and as applied to claim 11**. Lehtovirta and Vialen disclose using a radio network control method which controls the connections to prepare the message (Lehtovirta; paragraph 20).

Consider **claim 13 and as applied to claim 11**. Lehtovirta and Vialen disclose performing at the node plural processes with each of the plural processes handling a respective one of plural subsets of connections with user equipment units in the connected mode; when the reset procedure affects a specific one of the plural processes, including in the message an element corresponding to the respective one of the plural subsets of connections handled by the specific one of the plural processes (Lehtovirta; paragraphs 15, 17).

Consider **claim 14 and as applied to claim 11**. Lehtovirta and Vialen disclose using a drift radio network control node which provides radio resources for the connections handled by a serving radio network control node to prepare the further message (Vialen; column 5 line 53 – column 6 line 4).

Consider **claim 16 and as applied to claim 15**. Lehtovirta and Vialen disclose performing at the serving control node plural processes with each of the plural processes handling a respective one of plural subsets of connections with user equipment units in the connected mode; when the reset procedure affects a specific one of the plural processes, including in the message an element corresponding to the respective one of the plural subsets of connections handled by the specific one of the plural processes (Lehtovirta; paragraphs 15, 17).

Consider **claim 17 and as applied to claim 15**. Lehtovirta and Vialen disclose sending, from the at least one drift control node, a response message to the serving control node (Vialen; column 5 line 53 – column 6 line 4).

Consider **claim 18 and as applied to claim 15**. Lehtovirta and Vialen disclose sending from the at least one drift control node the further message to the user equipment unit via a base station controlled by the at least one drift control node; including in the further message a further element, the further element being derived from the element included in the message (Vialen; column 5 lines 53 – column 6 line 4).

Consider **claim 24 and as applied to claim 1**. Lehtovirta and Vialen disclose wherein the reset procedure occurs as a result of a failure of the node or of a core network node (Lehtovirta; paragraphs 15, 17).

Consider **claim 25 and as applied to claim 7**. Lehtovirta and Vialen disclose wherein the reset procedure occurs as a result of a failure of the serving control node or of a core network node (Lehtovirta; paragraphs 15, 17).

Consider **claim 26 and as applied to claim 11**. Lehtovirta and Vialen disclose wherein the reset procedure occurs as a result of a failure of the node or of a core network control node (Lehtovirta; paragraphs 15, 17).

Consider **claim 27 and as applied to claim 15**. Lehtovirta and Vialen disclose wherein the reset procedure occurs as a result of a failure of the node or of a core network node (Lehtovirta; paragraphs 15, 17).

### **Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS

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of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
  
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Brandt whose telephone number is (571) 270-1098.

The examiner can normally be reached on 7:30a.m. to 5p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Christopher M Brandt/

Examiner, Art Unit 2617

November 4, 2010

/George Eng/

Supervisory Patent Examiner, Art Unit 2617